CLAIMS:

1. An electronic circuit (100) for operating a high-pressure lamp (120) in an ignition mode and a normal operational mode, comprising
a DC-AC converter comprising a first and a second half bridge (110-1, 110-2) which are connected in parallel between an operating potential (+) and a reference potential (-) for providing a suitable alternating current to the high-pressure lamp (120) in the two said operating modes; and
a series arrangement comprising a first coil (L1), followed by the high-pressure lamp (120), again followed by a second coil (L2), while the connection terminal of the first coil (L1) not connected to the high-pressure lamp (120) is connected to the output (112-1) of the first half bridge (110-1), and the connection terminal of the second coil (L2) not connected to the high-pressure lamp (120) is connected to the output (112-2) of the second half bridge (110-2), said outputs being each formed by a central tap of a half bridge;
characterized by a first capacitor (C1) which is connected in the path from the junction point of the first coil (L1) and the high-pressure lamp (120) either to the reference potential (-) or to the operating potential (+); and
a second capacitor (C2) which is connected in the path from the junction point of the high-pressure lamp (120) and the second coil (L2) either to the reference potential (-) or to the operating potential (+) or in parallel to the high-pressure lamp (120).

2. A circuit as claimed in claim 1, characterized in that a third capacitor (C3) is connected between the output (112-1) of the first half bridge (110-1) and either the operating potential (+) or the reference potential (-).

3. A circuit as claimed in claim 1, characterized in that a third capacitor (C3) is connected between the output (112-1) of the first half bridge (110-1) and the reference potential (-), and in that a fourth capacitor (C4) is connected between the operating potential (+) and the output (112-1) of the first half bridge (110-1).

4. A circuit as claimed in claim 1, characterized in that a fifth capacitor (C5) is connected between the output of the second half bridge (112-2) and the operating potential (+), and/or in that a sixth capacitor (C6) is connected between the reference potential (-) and the output (112-2) of the second half bridge (110-2).

5. A circuit as claimed in claim 1, characterized by
a sensor device (130) for generating a current-sensor signal which represents the value of the current through the first coil (L1); and by
a comparator device (140) for comparing the value represented by the current-sensor signal with a given reference current value I_R and for generating at least one control signal for controlling the level of the current through the first coil (L1) and through the high-pressure lamp (120) to the given reference current value I_R through a suitable variation of the duty cycles of the switching elements (T1, T2) of the first half bridge (110-1).

6. A circuit as claimed in claim 5, characterized in that the sensor device (130) is constructed as a magnetoresistive sensor.

7. A circuit as claimed in claim 5, characterized by a delay device (150) for delaying the control signal for controlling the switching elements (T1, T2) of the first half bridge (110-1) by a given delay time with respect to the moment when it is detected that the level exceeds the reference value I_R in upward or downward direction, which delay time is defined such that at least a desired critical damping establishes itself in a filter comprising the second coil (L2) and the first capacitor (C1), and that the current through the first coil (L1) changes its sign at least twice during a switching cycle of the switching elements (T1, T2) of the first half bridge.

8. A method of operating a high-pressure lamp (120) with a circuit as claimed in claim 1, characterized in that the first coil (L1) and the first capacitor (C1) together form a filter for filtering out at least substantially the AC component from the current flowing through the high-pressure lamp (120), which filter is supplied with a voltage provided by the first half bridge (110-1), whose frequency lies above the resonance frequency f_{R1} of the filter (L1, C1); and in that
the second coil (L2) and the second capacitor (C2) together form a resonant circuit which in the ignition mode is supplied with a voltage provided by the second half bridge (110-2),

whose frequency corresponds to the resonance frequency f_{R2} of the resonant circuit (L2, C2) or to an odd fraction thereof, so as to generate an ignition voltage necessary for igniting the high-pressure lamp (120).

9. A method as claimed in claim 8, characterized in that the ignition mode is maintained for at least one second, and in that immediately after that a switch is made to the normal operational mode.

10. A method as claimed in claim 9, characterized in that after ignition of the high-pressure lamp (120) the switching frequency of the second half bridge (110-2), and thus the frequency of the current through the high-pressure lamp (120), is reduced.

11. A method as claimed in claim 8, characterized in that the switching elements (T1, T2, T3, T4) of the first half bridge (110-1) and/or the second half bridge(110-2) are operated by the principle of voltageless switching.